ORIGINAL

Public Service Commission
State of North Dakota

DOCKET FILE COPY ORIGINAL

600 E. Boulevard Ave. Dept. 408 - State Capitol - 600 E. Boulevard
Bismarck, North Dakota 58505-0480
e-mail: msmail.sab@oracle.psc.state.nd
TDD 800-366-6888
Fax 701-328-2410
Phone 701-328-2400

April 11, 1996

APR 12 1996

Office of the Secretary
Federal Communications Commission
1919 M Street, N. W.
Washington, D. C. 20554

RE: CC Docket No. 96-45-Federal State Joint Board on Universal Service

Dear Secretary:

Enclosed are comments of the North Dakota Public Service Commission on Universal Service.

We appreciate the opportunity to file these comments.

Sincerely,

Illona A. Jeffcoat-Sacco, Director
Public Utilities Division

sdh

Enclosures

No. of Copies rec'd 0 + 3
List ABCDE

Before the
Federal Communications Commission
Washington, D. C. 20554

In the Matter of
Federal-State Joint Board on
Universal Service

FCC 96-93

CC Docket No. 96-45

COMMENTS BY THE NORTH DAKOTA PUBLIC SERVICE COMMISSION

April 11, 1996

The North Dakota Public Service Commission submits the following comments concerning the notice of proposed rulemaking to define universal telecommunications service. This issue is very important because North Dakota is a less densely populated state and changes in the definition of universal service and changes in the level of funding or methods of supporting universal services will have a significant impact on our state. We support the national principles which work for the preservation and advancement of universal service. We hope that any universal service changes made by the FCC will be fair to both rural and urban America. North Dakota rural telephone companies need fair, high-cost assistance from the Universal Service Fund so that they can continue to offer affordable, quality telecommunications services to their customers.

A recent telecommunications infrastructure study completed June 22, 1995, for North Dakota by Federal Engineering, Inc. as part of the National Telecommunications and Information Administration Grant Program entitled "Final Report—Comprehensive NTIA Planning Grant Project" found that, although the legislature had deregulated telecommunications within North Dakota, some telecommunications problems need to be addressed. The study found that monopolistic bottlenecks were limiting telecommunications choices for North Dakotans, that free calling areas were small, long distance company points of presence remained few, and the availability of affordable ISDN and other wideband services was hardly widespread. We have attached pages 1 through 9 of the Executive Summary from that study.

The North Dakota PSC is concerned about all issues in the notice, but we have chosen specific issues for comment.

Core Services to Receive Universal Service Funding (Section III.B)

The core services that we believe should receive USF funding are voice grade service, single party service including touch-tone signaling, and access to basic and enhanced 911.

Beneficiaries of Services (Sections III and IV)

With respect to each support mechanism, we know that you must determine the beneficiaries of the support. We do not feel that support for rural, insular, and high cost areas should be limited to residence users or residence and single line business users. We feel that support for these 4 core services should be provided to all users in such areas, including urban, rural, residence, business, educational institutions, health care providers, libraries, and low income customers so that all have access to core services at affordable rates. Customers who are eligible for other types of low-income assistance should be eligible for low-income customer telecommunications support funds.

Access to Advanced Telecommunications Services (Section II)

We strongly agree with the policy which states that access to advanced telecommunications and information services should be provided in all regions of the nation. This is very important to North Dakotans since our state has many areas of low population density. We want people who live and work in these areas to be able to afford to participate in the opportunities that are offered by new telecommunications technology. This is also important to businesses in rural areas since they are greatly dependent on the telecommunications network to market their products and services nationally and internationally.

Advanced telecommunications services which should be considered for universal support in the future include access to information services such as Internet access and specifications for data transmission.

Provider of Last Resort (Section III.B.3)

Currently, North Dakota has no unserved areas. No area should be without telephone service. Any rules adopted by the FCC should clearly state how any unserved area would receive service and how such service should be designated, if need be, by the PSC and/or the FCC.

Access to Local Exchange Company Information (Section III.C)

Currently, all existing local exchange companies provide free access to information regarding service activation and termination, repair and telephone subsidy programs. We think that free access to the telephone service provider for low income customers should be included within the group of services receiving universal service support. We feel that access to that information is essential to public health and safety and is consistent with the public interest, convenience and necessity.

Lifeline and Link-Up (Section III.C)

In the notice you ask whether there are any other changes to your Lifeline and Link-Up program that should be made as part of an overall mechanism to ensure that quality services are available at just, reasonable and affordable rates for low income subscribers. In North Dakota, some of our low income subscribers do not have access to the Lifeline and Link-up programs because they are customers of Rural Telephone

Cooperatives or small companies which do not participate in these programs. We would like the FCC to require any company which receives Universal Service Funds to ensure that customers are able to participate in the Lifeline and Link-Up America programs. We have no jurisdiction to require that all North Dakota companies participate in interstate programs or that they participate in a state program.

Services for the Homeless (Section III.C.1)

We agree that for some individuals who move frequently or have no residence, access to conventional residential telecommunications service may not be practical. Recently U S WEST Communications, Inc. informed our commission that at the present time it is making available 750 voice mailboxes to various non-profit agencies in the Fargo-Moorhead area who serve the needs of the homeless and phoneless. Fargo is located in North Dakota, and Moorhead is across the Red River in Minnesota. We do not know how many of these voice mailboxes will be used by North Dakota residents. However, we are pleased that there will be no charge for this service at the present time and that it will help people who are actively seeking employment or housing but do not have a permanent home address or telephone service. Several cities in our state have homeless shelters, and people who are referred to these shelters have access to free local calling privileges. However, free voice mail service is available only in one city in North Dakota, and we know that this problem is not confined to this one part of our state.

Review of Universal Service--List of Services (Section III.D)

We believe that the list of universal services should be revisited each year for the first five years. This review period is necessary since our experience shows changes often must be made throughout the initial "testing period" of new rules. After five years, the universal service list should be seriously revisited every two years, with a monitoring report during the "off" years.

Technical Performance Reporting (Section III.D)

The North Dakota Public Service Commission feels that it is important for there to be information on service quality that would enable comparisons between the performance levels of various telecommunications carriers. This could create a market-based incentive for carriers to provide quality services. We agree that by providing consumers with easy access to publicly available data on the performance level of various carriers, you could potentially spur carriers to compete for customers, among other things, on the basis of service quality in an increasingly competitive telecommunications marketplace.

At the present time most North Dakota carriers are not required to provide Automated Reporting Management and Information System reports to the FCC. In North Dakota, only U S WEST is required to provide this information. We have 22 other facility based local exchange carriers, and in the future there may be non-wireline companies providing local exchange service as well that at present are not required to send this information to the FCC, or to the North Dakota Public Service Commission.

Under North Dakota law, all of the Rural Telephone Cooperatives and the telephone companies which serve less than 8000 lines are exempt from quality of service oversight by the North Dakota Public Service Commission. Of the 23 local exchange companies serving North Dakota subscribers, only three provided copies of ARMIS reports to the ND PSC on an annual basis.

To our knowledge, there is no industry organization in North Dakota that is collecting performance information and making this information public. Therefore, in North Dakota, you would not be able to rely upon existing information and may wish to extend your existing reporting requirements to all carriers who receive universal service funds. We feel that it would be prudent to review the need for quality of service reports as local service competition develops. We do not have a specific suggestion for the frequency that the FCC should review the need for those reports.

Administration of the Universal Service Fund (Section VII.B.3)

We believe that the National Exchange Carrier Association has done an excellent job of administering the current Universal Service Fund and should serve as administrator of the "new" universal service fund. A universal service advisory council should be established, should be broad-based and should include state commissioners.

We believe that PSCs or groups of PSCs should not administer the federal universal service fund on their own, however, we feel that they should be a part of any administrative process.

Other Attachments

Also attached are comments of the North Dakota Department of Health and a letter from North Dakota Legal Services.

PUBLIC SERVICE COMMISSION

Bruce Hagen	Susan E. Wefald	Leo M. Reinbold
Commissioner	President	Commissioner

SECTION 1

EXECUTIVE SUMMARY

1.1 INTRODUCTION

We are in the midst of an information explosion. The public is becoming more aware of information media and the tremendous potential they hold for improving how our children's education, our competitiveness in business, and our overall quality of life. Telecommunications networks, the transport technology for information, are also in the midst of considerable upheaval as commissions and legislatures wrestle with reshaping rules for the benefit of all, whether in education, business, government, or the public. Recently the FCC Chairman Reed Hundt said, "Because of networks, the information sector of our economy will be as much as one-sixth of the GNP by the year 1997. And, by the year 2000, it will be the world's single largest industry, with revenues exceeding $2 trillion." Given the size of the stakes, can anyone afford *not* to be involved?

In late 1994 the State of North Dakota applied for and received a matching grant from the U.S. Department of Commerce, NTIA, to undertake the development of a comprehensive telecommunications plan for North Dakota. This Executive Summary briefly outlines the results of that endeavor.

1.2 APPROACH

Federal Engineering, Inc., an independent telecommunications consulting firm, under the direction of the NTIA Grant Steering Committee, began this study effort in January 1995. The initial activity centered around data gathering on three fronts: a community of interest needs analysis, a telecommunications network infrastructure inventory, and a regulatory and legislative activity review. Twelve communities of interest were identified, and 54 interviews and 14 focus group meetings were conducted across the State. The interviews and meetings provided comprehensive needs related input to the study effort. When compared to the telecommunications networks in place and planned, these needs helped determine the plan elements. The impacts of regulatory and legislative actions were also accounted for in the resulting recommendations.

1.3 STATEMENT OF THE PROBLEM

Keeping in mind the comprehensive nature of the study, the most significant problem area affecting all communities of interest is related to the telecommunications infrastructure. The service providers in North Dakota, and in particular the local and long distance telecommunications carriers, have developed a relatively modern and, from a technology standpoint, sophisticated network infrastructure. The State Information Services Division has also very successfully leveraged that network to provide very effective voice, data, and video backbone networks directed principally at fulfilling State agency and educational needs.

In its simplest terms, the problem for telecommunications users is that these capabilities are not universally available to businesses or the citizens of North Dakota. The building of the telecommunications network infrastructure is not yet completed. Digital switching and interoffice fiber optic links are absolutely necessary for an infrastructure to support the voice, data, and video information needs of the future. To be effective in obtaining the maximum benefit from such backbone networks, however, comprehensive access must be available to all communities of interest, regardless of location.

Just as a chain is only as strong as its weakest link, this "last mile" represents the ultimate weak link between the customer and the "network." Although fiber in most cases is not a requirement, digital bandwidth is necessary for this last leg for users to enjoy a truly modern telecommunications infrastructure. This is undoubtedly the most difficult and expensive part of the building of a comprehensive information infrastructure, and it should be pointed out that no state has yet succeeded in its accomplishment. Selective investment appears to be the most viable solution for most states with limited financial resources. To do nothing will relegate a State to a position from which it can never compete because of the extremely high costs of catching up.

From many service providers' point of view, "last mile" or access infrastructure represents a high cost, especially in a mostly rural state like North Dakota. Service providers understandably want to recover their investments in existing plant before they consider making the next level of commitment. In this respect, shortening the permissible depreciation period

for capital investments can play an important role in motivating carriers to advance their investment plans.

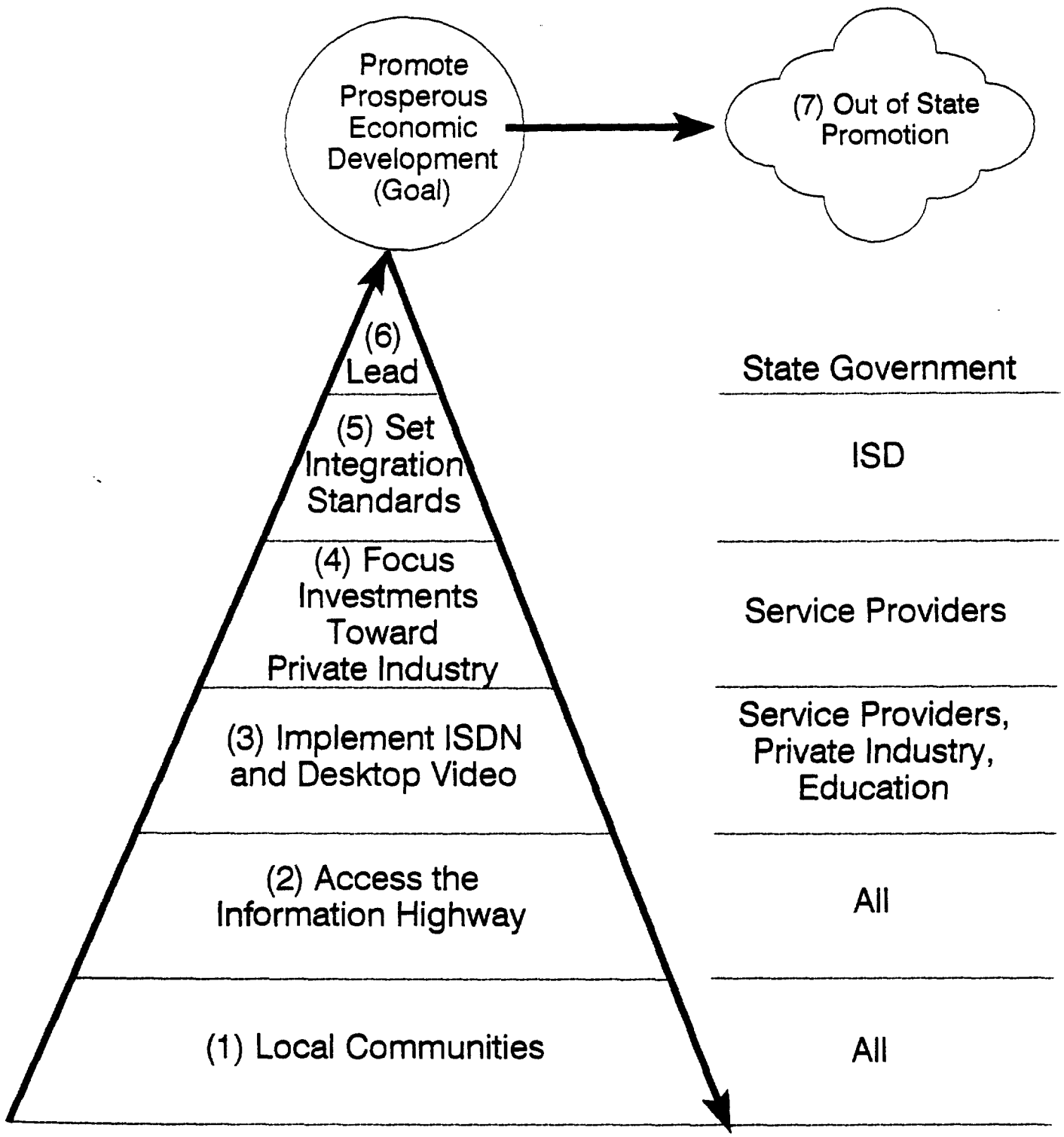
1.4 PLAN RECOMMENDATIONS

The comprehensive telecommunications plan is represented by a community of interest strategy, a set of more specific technology related actions, and a compilation of eight pilot projects that should be pursued to both test and begin the implementation of the strategy. The Community of Interest Strategy, pictorially illustrated in Exhibit 1-1, includes an overall strategic goal and a series of seven general or comprehensive recommendations. Exhibit 1-1 indicates that the strategy is based on both a bottoms-up and top-down approach and identifies the principal domains of responsibility.

The first step in the plans is to define a goal. All plans have a greater chance of success if the goal is focused, straightforward, and applies to all who may be touched by the plan. For this plan, the goal which impacts all communities of interest in a positive fashion and which all can readily support is ***to promote prosperous economic development in North Dakota through telecommunications.***

The first recommendation represents a paradigm shift in the way to approach building a sophisticated telecommunications infrastructure. Most large organizations tend to focus their efforts on building very expensive high speed digital "backbone" networks; then, they are driven to utilize the available capacity. North Dakota already has a reasonable digital backbone

Exhibit 1-1. COMMUNITY OF INTEREST STRATEGY



(n)-Recommendation number

infrastructure. Inspection of the infrastructure inventory section of this report will reveal significant digital switching and transmission capacity, as well as fiber optic transport facilities. The key to this recommendation is thus ***to focus new investment on extending the existing digital infrastructure all the way to the customer.*** This task is neither easy nor inexpensive, but must eventually be done in all networks if the public is to enjoy the full benefits of emerging technologies, and if North Dakota is to be competitive.

The next three recommendations offer a transition to the eventual elimination of the "last mile" problem. Through cooperative grouping of needs, or demand, and selective investments in technology and location, significant access at reduced costs can be achieved.

Access to the Internet, or Information Superhighway, is the first--and perhaps the easiest--step, with the greatest potential impact on the largest number of citizens. Access to the Internet is available today at all county seats through the State information network or private vendors. The investment would probably be limited to that which might be required to provide local access (EAS) to a county seat for all citizens. Access charges at the county seats are reasonable and vary by the access method and digital data speed desired. This second recommendation makes ***data communications available to every North Dakotan without incurring a toll charge.***

The second transition step is directed at service providers who must make the investments necessary to begin conversion of the last link. ISDN, or Integrated Services Digital

Network, designates a technology which enables high speed digital signals to pass over a pair of existing copper wires directly to a customer. ***With ISDN technology, the digital backbone infrastructure can be extended all the way to a customer using the available copper plant*** in most cases, obviating the need for fiber optics. ISDN technology is also recommended for desktop video, which might be described as two-way video hookups between computers. Desktop video is one way to extend interactive video to all citizens. To justify these investments, the initial deployment will take place in the more dense locations and where demand can be concentrated.

Service providers are again the focus of the third transition step. Economic development for the State can probably be enhanced more in this step than in any other. If it is true that the State of North Dakota cannot afford to invest millions of dollars to create the superb high speed digital superhighways that certain other states are creating, then the next best step may be to demonstrate to industry outside of the State that superb telecommunications service will be provided to industry that moves into the State. This can best be demonstrated by examples of how well existing industry in the State is supported. This recommendation is a plea for ***taking the economic risks necessary to support the goal of this plan.*** If the accomplishment of the goal benefits all communities of interest, then the risks are manageable.

The fifth and sixth recommendations call for leadership. Although the core of this planning effort is a plan for using telecommunications to promote prosperous economic development, information itself drives the need. Information is everywhere, unorganized,

fragmented, redundant, and unmanaged. By itself, the most sophisticated transport network conceived will not resolve the information problem. However, as industry is discovering, important inroads are being made through such techniques as reengineering processes, separating data from applications, and integrating databases. The benefits of integrated data repositories are typically reflected in simpler telecommunications networks, streamlined applications, decreased maintenance costs, and savings in integrating applications.

The State should take the lead and begin the process of selectively integrating databases. Downstream users already see the need. The State's ability to set standards has already been demonstrated in the telecommunications networks it has overseen. Now the various departments using those networks side by side should be evaluated for further integration.

Recommendation six requires ***commitment at the highest levels of State government to support the plan.*** Experience has shown that the best of plans cannot succeed without the full understanding and support of higher management, in this case the Governor's office. While this plan does not request huge expenditure allocations from State government, it does require certain policy changes. Regulatory authority to establish and enforce appropriate telecommunications service levels, some funding of pilots, and a consistent show of visible support to maintain momentum are essential.

Finally, ***North Dakota must continue to promote itself in ever more sophisticated ways.*** Like it or not, North Dakota is in direct competition with its sister states for economic

development. In the past, North Dakota's superb business climate went largely unrecognized by businesses contemplating relocation because the State had not spent the time and money to create a favorable image for itself. If this all important marketing dimension were to be ignored, then all of the State's other efforts would likely be in vain. With adequate attention, however, self promotion can fulfill the vast potential that the other recommendations of this plan make possible.

1.5 TECHNOLOGY PLAN ACTIONS

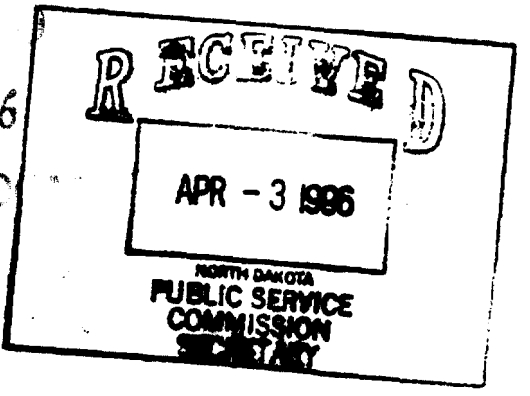
The second part of the telecommunications plan focuses on the alternatives that are available to break the infrastructure bottleneck.

The elimination of toll charges to access a county seat can be accomplished in several ways. For example, 1-800 calling has been tried in the past for Sendit service, but was found to be both expensive and subject to annual budget limits. Such an arrangement can also provide toll free county seat access, or the costs of providing local service can be covered through State financing. Local service providers could also volunteer the service in anticipation that community cluster usage will one day justify it. Finally, the legislative process may be invoked to establish local service rates for county seat access.

As calling rates and usage demands increase, it will become easier for a service provider or investor to justify the required infrastructure investments. Clustering provides for preconcentrating demand so that investment is minimized. Creating pockets of demand and

NORTH DAKOTA
DEPARTMENT OF HEALTH
600 E. Boulevard Avenue
Bismarck, ND 58505-0200

OFFICE OF
STATE HEALTH OFFICER
701-328-2372
FAX 701-328-4727



April 1, 1996

APR 1 2 1996

Office of the Secretary
Federal Communications Commission
1919 M Street NW
Washington, DC 20554

RE: Informal Comments -- CC Docket No. 96-45

Gentlemen:

As the State Health Officer in North Dakota concerned about access, quality and cost of health care, I appreciate the opportunity to provide comments about the Act and its affect on telemedicine and health care providers. Telemedicine is viewed by our office as effective, efficient access for the many rural residents in our state. We feel every effort should be made to make their health care comparable to the urban residents of our state. We are actively involved in licensure, quality, reimbursement and malpractice issues related to telemedicine.

In response to some of the specific paragraphs:

Section IV.A., paragraph 71: In addition to course services discussed in section III, rapid line services for the rural health providers are becoming a necessity. Rural telemedicine services include two-way video service with consulting specialists in the urban area and patients from the remote rural area. High-speed telecommunications capability at this time include asynchronous transfer mode and integrated systems digital network technologies. The definition here must be fluid as the technologies and availability of technologies and cost-effectiveness of technologies are constantly changing and advancing.

Paragraph 73: North Dakota is an extremely sparsely populated state with population density of nine people per square mile. There are four population centers with specialty care services available. To provide necessary health services in this state, there should be adequate access to specialty services. Access to these services should not require a 3-hour travel over a highway. Transmission of pictures, sound, images such as x-rays or electrocardiograms and other laboratory information should be available and should connect the urban areas to the rural service providers.

Section C.1., paragraph 90: In addition to those services mentioned above, continuing medical education services are necessary in the rural areas and appropriate communications equipment and technology should be supported for these areas.

Paragraph 91: In addition to the services mentioned in this paragraph, consideration must be given to security issues. These lines must be secure so that personal medical information cannot be intercepted and disseminated to an undesired population. Patients have a great fear of providing confidential personal messages to a television audience.

Paragraph 92: With the assistance of a private grant and through independent and local funding to telemedicine communications, networks have been established in the state of North Dakota. These networks are small serving six different sites. They are currently technically feasible using dedicated T-1 lines. These lines have been necessary for security purposes and for adequate access. Though they may be only used for a few minutes daily, this level of support seems necessary at this time. Improvement in capabilities could improve the economic feasibility.

Paragraph 94: Telemedicine remains in its infancy. There are only a few providers available at this time. Limiting discounts to ingoing or outgoing services would be very difficult. The services provided are generally two-way.

Section 2., paragraph 95: I would suggest that rural counties be defined on a population density basis or that any county not including a metropolitan statistical area be considered a rural area.

Paragraph 96: This use of metropolitan statistical areas would not be objectionable in our area. We do not have any extremely large metropolitan statistical areas that contain very rural areas.

Paragraph 97: I would caution against using county population as a sole determinant. Counties can vary significantly in size and a county of 20,000 people could conceivably be more rural than another county of 2,500 people. As an example, Nevada and Iowa might both be considered relatively rural states. Nevada has 17 counties with an average population per county of 70,696 but only about 11 people per square mile. Iowa has 99 counties, it has only 20,048 people per county but has a population density of 53 people per square mile. Based on the population density, Nevada would be significantly more rural than Iowa. Based on the population per county, Iowa would be significantly more rural than Nevada. I think that the people per square mile is a more appropriate measure of ruralness.

Paragraph 98: I think the population density model, determining an arbitrary figure of people per square mile above which would be considered urban and below which would be considered rural, would give you some defining criteria and could be applied across the country in calculations made to determine costs associated with various levels of population density.

Population 100: Although admittedly an arbitrary basis, I would recommend the use of a mean state urban rate ±10% as a reasonably comparable for this purpose.

Paragraph 101: As in paragraph 100, I think mean urban rates should be used for comparison purposes in this area also.

Paragraph 103: There should be certification from either the rural health care provider or the carrier that such services are necessary for the provision of health care services and this should be in writing. An ongoing log of the uses of the service should be maintained and should be

open to a reviewing agency on a periodic basis so that it can be assured that the service is being used appropriately.

Section 3. Who Is Eligible For Support: no comment.

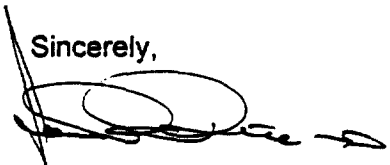
Section V. Enhancing Access to Advanced Services for Schools, Libraries, and Health Care Providers, A. Goals and Principles: no comment.

B. How to Implement, paragraph 110: I feel that this paragraph is somewhat problematical. We are attempting to enhance services to the rural areas and provide access to services. If these services can be utilized by the private sector to improve the efficiency and use and make this more cost-effective, this should be allowed. The services should be prorated so that those services that are provided for the institution are provided at an institutional rate and those services provided to the private sector are provided at the private rate. I do not think that this separation would be unduly burdensome. It would require only two rates, but would enhance the use of equipment that is being encouraged in the rural area rather than allowing it to stand empty and unused.

Paragraph 111: It is possible to conclude that the provision of enhanced services to the rural health care providers will be provided by other health care providers; therefore, all health care providers are involved and all will benefit. Those that benefit the most are the patients.

I thank you for the opportunity to comment. If you have any specific questions about my comments, please feel free to contact me.

Sincerely,



Jon R. Rice, M.D.
State Health Officer

JRR:lrr
cc: Public Service Commission
Center for Rural Health, Grand Forks